

Defense Cost and Resource Center CSDR Focus Group



Ron Lile
October 2004

A collage of various defense-related images including a satellite, a stealth bomber, a rocket launch, a helicopter, a tank, a ship, and a fighter jet.

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The Defense Cost and Resource Center
1111 Jefferson Davis Hwy, Suite 500
Arlington, Virginia 22202
Phone: 703.602.3301 Fax: 703.602.8944
<http://dcarc.pae.osd.mil>

Agenda

Tuesday, October 26

- ◆ Admin Remarks and Introduction Gary Bliss/Ron Lile 08:30-08:45
- ◆ Overview and Initiatives Ron Lile 08:45-09:15
- ◆ CCDR Validation Mike Augustus 09:15-09:45
- ◆ Training Bob Currie 09:45-10:15
- ◆ Break 10:15-10:30
- ◆ DCAA Reviews Vicky Post 10:30-11:00
- ◆ Status of Manual(s) Ron Lile/Jack Cloos 11:00-12:00
- ◆ Lunch 12:00-12:45
- ◆ DID Presentation and Discussion Ron/Lile/Jack Cloos 12:45-14:30
- ◆ Break 14:30-14:45
- ◆ DID Discussion (Concluded) 14:45-15:30
- ◆ Subcontractor Reporting Ron Lile/Jack Cloos 15:30-16:15

Wednesday, October 27

- ◆ Subcontractor Reporting (Concluded) Ron Lile/Jack Cloos 0830-09:45
- ◆ Break 09:45-10:00
- ◆ WBS and MIL-HDBK-881 Update Neil Albert 10:00-10:30
- ◆ Recap of Issues and Wrap-up Ron Lile 10:30-11:15





Administrative Remarks and Introduction

Defense Cost and Resource Center



Overview & Initiatives

Ron Lile

*October
2004*

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A collage of various military and defense-related images, including a satellite, a stealth bomber, a rocket launch, a helicopter, a tank, a ship, and various aircraft.

Current DCARC Initiatives

- ◆ Shifted resources towards analytical activities
 - Cost and Software Data Reporting (CSDR) Plans
 - Validation of submissions
 - Tracking compliance
 - Revamped training program
 - Starting SRDR training
- ◆ IT activities focused on three main areas
 - Data/System access (i.e., helpdesk, certificates)
 - Data collection (i.e., pre-processor, validator, XML)
 - Automating business process (i.e., eRooms)
- ◆ Engaged external “oversight” stakeholders
 - DCMA, DCAA, AT&L



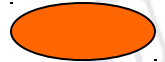
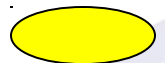
DCARC Activities

- ◆ Analytical Activities
 - **Obtain, prepare and load supporting documentation** 200 200 200
 - Assist in reviewing/developing CSDR Plans
 - Validate CSDR Submissions
- ◆ Training & Outreach Activities
 - Conduct CSDR training
 - Closer coordination with other stakeholders
- ◆ Policy Activities
 - **Develop and implement changes to CCDR format and collection**
 - **Assist in the integration of EVM and CCDR data**
 - Oversee changes to CCDR Manual
- ◆ Support Activities
 - **Overcome perception of system/data access problems**
 - **Get data for support contractors**
 - Obtain DISTCAP certification
- ◆ Automation Activities
 - **Migrate system to eRoom**
 - **Develop XML schema, new-preprocessor and validator for data collection**
 - Maintenance of existing systems



Analytical Activities

- ◆ ***Obtain, prepare and load supporting documentation***
 - Cleaned up supporting documentation
 - Populating tracking system (CIRTS)
 - Conducting DAES Assessments
- ◆ Assist in reviewing/developing CSDR Plans
- ◆ Validate CSDR Submissions



Training & Outreach Activities

- ◆ Revamped training methodology
- ◆ Coordination with DCAA
- ◆ Coordination with OSD(AT&L)
 - Acquisition Resources and Analysis (ARA)
 - Include status of CSDR in DAES Assessments
 - Update MIL-HDBK-881B
 - Revise EVM DID
 - Defense Procurement & Acquisition Policy
 - Turning attention to contracting community



1st Round DAES ACAT 1 CCDR Status

Pre-MDAP Programs	Pre-Milestone B Programs	Active Programs w/CAIG Approved CSDR Plans & Incoming Data	Active Programs w/Program Office Engaged in CSDR Plan Development	Active Programs w/CAIG Approved CSDR Plans & Data Issues	Active Programs w/o CAIG Approved CSDR Plans & Data Issues	Programs w/CAIG Approved Waivers	Post MDAP Programs
ACS** ADS AOC-WS B-2 RPP BAMS CH-53X CM** DCGS ARMY E/A-18G** E-10A GCCS-AF GCSS-A J LENS J OINT UCAS J PALS J TRS CLUSTER 3 J TRS CLUSTER 4 KC-767 KI LCS LHA(R) MKV MMA** MPF(F) MPS NATO SATCOM PREDATOR B PRV SBR** SBSS SDB** SM-6 (ERAM)** T-AOE(X) TSAT* VXX	ABB ABL COBRA J UDY* CVN-21 HPCM J TRS CLUSTER 5 MEADS** MP RTIP* MUOS* STSS	AARGM (SDD) E-2C REPROD HIMARS J AVELIN J STARS J TRS WAVEFORMS J TRS CLUSTER 1 Longbow Hellfire TAC TOMAHAWK WIN-T*	AEGIS BMD E-2C ADV Hawkeye GMLRS (LRIP) USMC H-1 (LRIP)	AAAV AEHF AESA ATIRCM/CMWS AWACS RSIP B-1 CMUP C-130 AMP C-5 RERP CEC CH-47F DD(X) F-35 FBCB2 FCS FMTV GBS GLOBAL HAWK GMD J ASSM (EMD) J DAM (EMD) J SOW MCS (ATCCS) MH-60S MM III GRP NAVSTAR GPS NPOESS Patriot PAC-3 RAH-66 SBIRS HIGH STRYKER T-45 TS THAAD UH-60M V-22	ABRAMS UPGRADE AIM-9X AMRAAM ASDS B-2A BRADLEY UPGRADE C-17A EXCALIBUR F/A-18 E/F F/A-22 J PATS (PROD) LAND WARRIOR Longbow Apache LPD-17 MH-60R MM III PRP NESP SM 2 SSGN SSN 774 TRIDENT II	CHEM DEMIL C-130J CVN-77 DDG 51 EELV J ASSM (LRIP) J DAM (LRIP) J PATS (EMD) LHD 1 MIDS-LVT NAS T-AKE WGS	AV-8B CGS DMSP MILSTAR SMART T SQ-89 TITAN IV
35	10	10	4	34	21	13	7
TOTAL PROGRAMS	134						
AT&L	93						
C3I	17						
MDA	10						
SPACE	14						

*-CAIG Approved Program CSDR Plan

**Program Office engaged in Program CSDR Plan Development

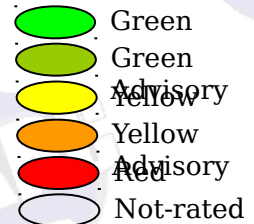
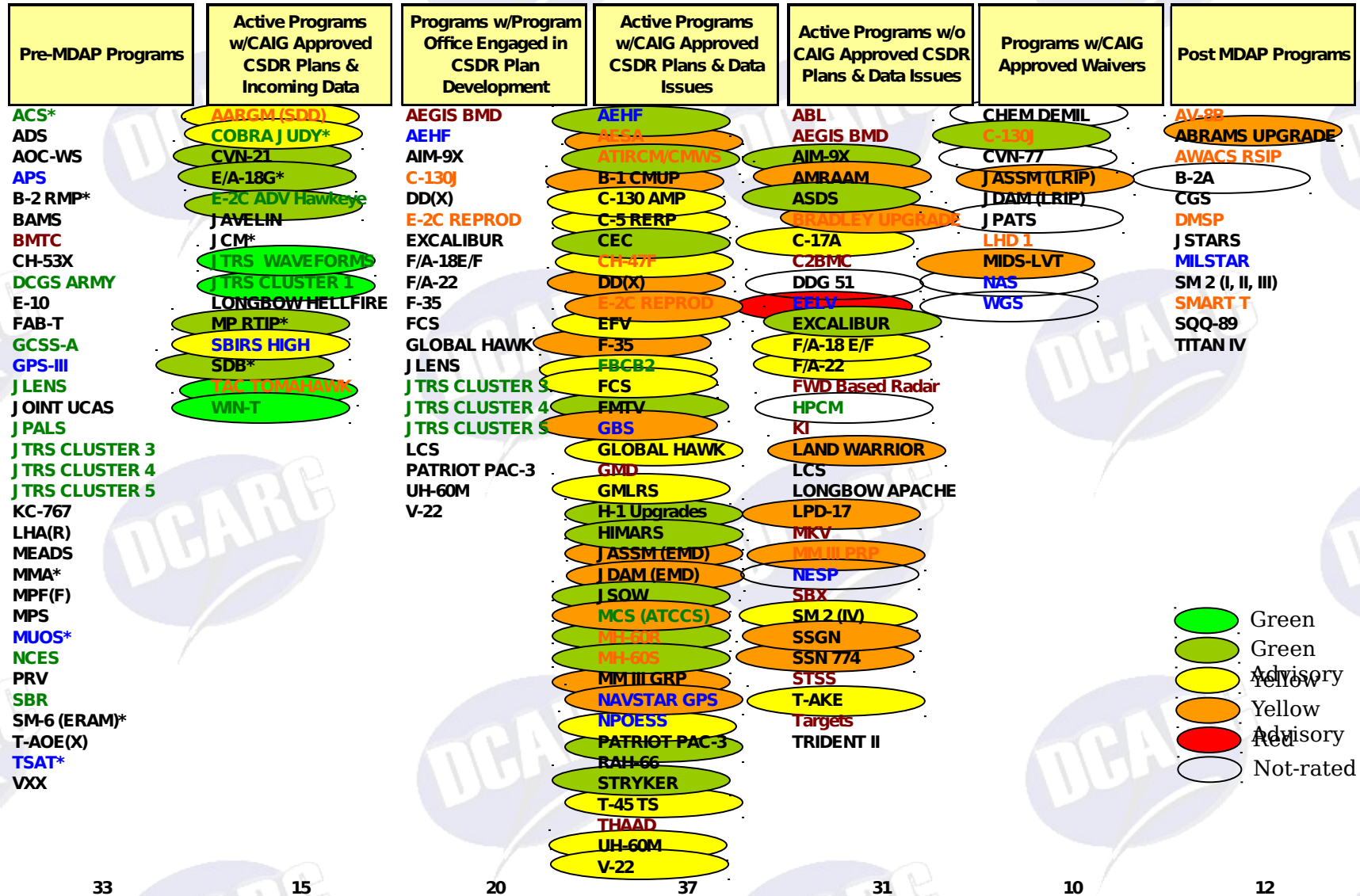
***CARD missing CSDR Plans, Program Office non-responsive

Programs Never Designated ACAT iD

Note: Data based on USD(AT&L) Memo dated July 1, 2003 re Addendum to FY2003 MDAP Lists

As of March 10,
2004

3rd Round DAES ACAT 1 CCCR Status



Policy Activities

- ◆ ***Develop and implement changes to CCDR format and collection***
 - Shifting focus to CCDR formats and data
 - Contractor Overhead data
 - Cost of CCDR collection
- ◆ ***Assist in the integration of EVM and CCDR data***
 - Joint Industry/Government EVM Working Group reviewed proposed changes to CPR DID
 - Format 1 Mandatory & tied to CSDR Plan
 - Accepted
 - Consistent G&A below the line reporting
 - Industry opposed, but government going forward
 - Starting to update the MIL-HDBK-881B
- ◆ **Oversee changes to CCDR Manual**
 - Combined DoD 5000.4M-1 ready for final & official coordination since February 2004

Automation Activities

- ◆ ***Migrate system to eRoom***
 - Prototype System installed and operational
 - Awaiting delivery of eRoom Content Management Server
 - Further development on hold
- ◆ ***Develop XML schema, new-preprocessor and validator for data collection***
 - Finishing development effort
 - Roughly 7 weeks behind (from last CAIG Update)
 - Alpha testing scheduled to start 23 Aug 04
- ◆ Maintenance of existing systems (DACIMS)
 - Developed Forward Pricing Rate & Software Libraries
 - Password Management
 - Password reset via eMail & Change password
 - New File Uploader for Material Developers

Support Activities

- ◆ **Overcome perception of system/data access problems**

- Register DCARC Users (DACIMS & Data Submission)
 - Average time from request thru approval: 2 Days
 - Average time to verify employee status/clearance: 2 Days
 - Average time for certificate creation and installation: 10 min
 - Average time for data submission calls: 5 min
- User Statistics:
 - 330 Registered Users
 - ~100 Active Users
 - Password Management: Password reset via eMail & Change password
- Data Submission
 - Implemented Web Upload Service on 13 May 04
 - Shifting all data submission request to the web.
 - Since 13 May 04: 12 Contractors and 98 total files submitted
 - Reduced the average time for data submission calls from 20 min to 5 min
- Public Website
 - Takes backseat to other tasks

- ◆ **Get data for support contractors**

- Small number of requests

Support Activities

- ◆ DITSCAP certification
 - Document reviewed by PA&E
 - PA&E requested that DCARC become accredited via OSD
 - Document submitted to DISA via OSD process
 - DITSCAP adjudication in progress
 - OSD-CIO Penetration Test Team site visit complete
 - Positive response from team
 - DCARC & Team cleared all Category 1 security vulnerabilities
 - Received verbal notification of certifying authority (DISA) recommending to DAA (OSD CIO) of DCARC Approval to Operate
 - Awaiting certification letter
 - **2nd OSD system to attain accreditation**



Summary

- ◆ Analysis Activities are improving
 - DAES process is a “double-edged sword”
 - Improvements in cost data collection
 - Longer and longer queues: Quality issues continue
- ◆ Training & Outreach Activities are bearing fruit
 - New training is well received
 - Great coordination with AT&L on EVMS and WBS
- ◆ Slow progress in Policy Activities
 - No approved SRDR DIDs
 - No approved SRDR manual from October 2002 to February 2004
 - Interim guidance in effect since February 2004
 - Programs waiting for final manual
- ◆ Improvements in Automation Activities are mixed
- ◆ Support Activities have shown significant progress



Where We Are Today

- ◆ Launched in directions that are beneficial to the DoD Cost Estimating Community
 - Entire team is committed to meeting the community's needs; also committed to continuous re-engineering
- ◆ Starting to see improvements
 - Developing CSDR plans and monitoring compliance
 - Senior DoD leadership getting involved

The DoD is emphasizing that CSDR is important



Defense Cost & Resource Center (DCARC)

Analytical Activities

Focus Group Meeting

October 26, 2004

Mike Augustus
<http://dcarc.pae.osd.mil>

A collage of various military images including a satellite, a stealth bomber, a rocket launch, a helicopter, a tank, a ship, and an aircraft carrier. Overlaid on the collage is a blue banner with the text "The On-line DoD Cost Research Library" and another blue banner with the text "Enhancing DoD Cost Analysis". At the bottom, a white box contains the text "The Defense Cost and Resource Center", "1111 Jefferson Davis Hwy; Suite 500", "Arlington, Virginia 22202", "Phone: 703.602.3301 Fax: 703.602.8944", and "http://dcarc.pae.osd.mil".

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CSDR Plan Status

- Approved Plans

APPROVED PLANS CY 2004			
	1C	1D	TOTAL
Program Plans	13	13	26
Contract Plans	30	29	59
Subcontract Plans	1	19	20
TOTAL	44	61	105

- Plans in progress

PLANS IN PROGRESS			
	1C	1D	TOTAL
Program Plans	1	9	10
Contract Plans	16	20	36
Subcontract Plans	7	20	27
TOTAL	24	49	73



Analytical Activities

- Validate CSDR Submissions
 - Little effort in 2002 and 2003
 - Significant backlog
 - Starting a “catch-up” plan
 - All “pending” submissions will be placed in DACIMS
 - All submissions in DACIMS will have a “Validated” field
 - All submissions with as of dates after 31 December 2001 will be validated



Validation Status



IC MDAP PROGRAMS				
CRITERIA	CY2002	CY2003	CY2004	Total
CCDR Reports Received	75	113	124	312
CCDR Reports Validated:	47	24	103	174
CCDR Reports Rejected:	31	19	51	101
Validation Rate/Yr	63%	21%	83%	56%
Rejection Rate/Yr	66%	79%	50%	58%

ID MDAP PROGRAMS				
CRITERIA	CY2002	CY2003	CY2004	Total
CCDR Reports Received	90	142	178	410
CCDR Reports Validated:	77	124	134	335
CCDR Reports Rejected:	69	116	111	296
Validation Rate/Yr	86%	87%	75%	82%
Rejection Rate/Yr	90%	94%	83%	88%

TOTAL MDAP PROGRAMS				
CRITERIA	CY2002	CY2003	CY2004	Total
CCDR Reports Received	165	255	302	722
CCDR Reports Validated:	124	148	237	509
CCDR Reports Rejected:	100	135	162	397
Validation Rate/Yr	75%	58%	78%	70%
Rejection Rate/Yr	81%	91%	68%	78%

CSDR Validation Issues

- The DCARC shall be the primary office for final receipt, validation, acceptance, and distribution of CCDRs for ACAT IC and ID programs and SRDRs for ACAT IA, IC and ID programs. The DCARC shall notify the reporting contractor, the responsible PM, and the cognizant Program Executive Officer (PEO) of any discrepancies identified during the validation process and ensures they are resolved in a timely manner. Contractors must submit the standard report formats in accordance with the guidelines in the CSDR Manual and DIDs.
- The PMs may request data other than is provided for on the standard formats, requiring tailoring of the formats. However, these tailored formats should be considered an additional requirement from the PM; they do not replace the standard formats that must be submitted to DCARC.
- The PM shall assist the DCARC in ensuring that reporting contractors promptly resolve all reporting deficiencies identified by DCARC during the validation process.
- The WBS shall include the WBS Dictionary, which describes each program/contract WBS element throughout the life of the contract. The reporting contractor shall prepare and submit the contract dictionary within 60 days of contract award. The reporting contractor shall maintain and update the WBS Dictionary throughout the life of the contract. The dictionary shall not be submitted more frequently than report submissions.
- All CCDRs must be submitted electronically. Reports for new or modified ACAT I contracts, awarded after October 1, 2003, must be submitted as

Defense Cost and Resource Center CSDBR Training Update



Oct 26, 2004
Robert Currie
Technomics, Inc.

A collage of various defense-related images including a satellite, a stealth bomber, a rocket launch, a helicopter, a tank, a ship, and a fighter jet. The images are arranged in a grid-like fashion with some overlapping.

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Agenda

- ◆ Recap Training Goals & Objectives
- ◆ CY04 Training Plan
- ◆ CY05 Training Plan
- ◆ CY04 Training Synopsis to Date
 - Aircraft
 - Missile/Ordnance
 - Space Systems



Recap Training Goals & Objectives

◆ Direct

- Reach out and touch all CSDR stakeholders
 - Educate, inform and persuade students on What, Who, When, Where & How
- Improve the quality (i.e. accuracy, timeliness, & completeness) of CSDR Plans and Submissions

◆ Indirect

- Increase the Acceptance Rate of CSDR Submissions across all weapon system commodity areas
- Improve DAES CSDR performance metrics
- Getting good data to registered DACIMS users quicker



Recap Training Goals & Objectives

◆ CSDR Plans

- Teach a tailored CSDR Plan development technique per MIL-HDBK-881WBS category
- Demonstrate the necessity and utility of the product-oriented, MIL-HDBK-881 WBS approach to Program, Contract & Subcontract Plans for each 881 category
- Teach roles & responsibilities of all CSDR stakeholders
- Illustrate development and relationships between CSDR Program, Contract and Subcontract Plans



Recap Training Goals & Objectives

◆ Submissions

– CCDDR Submissions

- We teach the development and relationships of the DD Form 1921, 1921-1 (Front) & Back) and DD Form 2630
- Exercises step through the submission development process using CARD, Acquisition Strategy, Schedule and approved CSDR Plans

– SRDR Submissions

- Demonstrate three type of submissions: Gov't estimate, Contractor estimate & actual



Recap Training Goals & Objectives

- ◆ Case Studies

- Structure

- CAIG analyst walks through the process of how the CAIG uses CCDR and SRDR data to build an estimate for a particular Major Defense Acquisition Program (MDAP)
 - Examples & illustrations demonstrate recurring vs non-recurring data issues and uses and applications of Functional Cost Hour Report (FCHR) data

- Benefits

- Material Developers are very appreciative of the opportunity to see how their data is used
 - DCARC gains important insight into how CAIG analysts think and thus approach the CSDR Plan development process, specifically how they approach WBS development and applicability/non-applicability of specific FCHR information.



Recap Training Goals & Objectives

◆ Breakout Sessions

– Purpose

- A closed-door meeting with DCARC, CAIG, PM and Material Developer on a specific MDAP
- An open forum to discuss strategy, CSDR plan development tactics, compliance ratings and performance, WBS issues, etc.

– Benefits

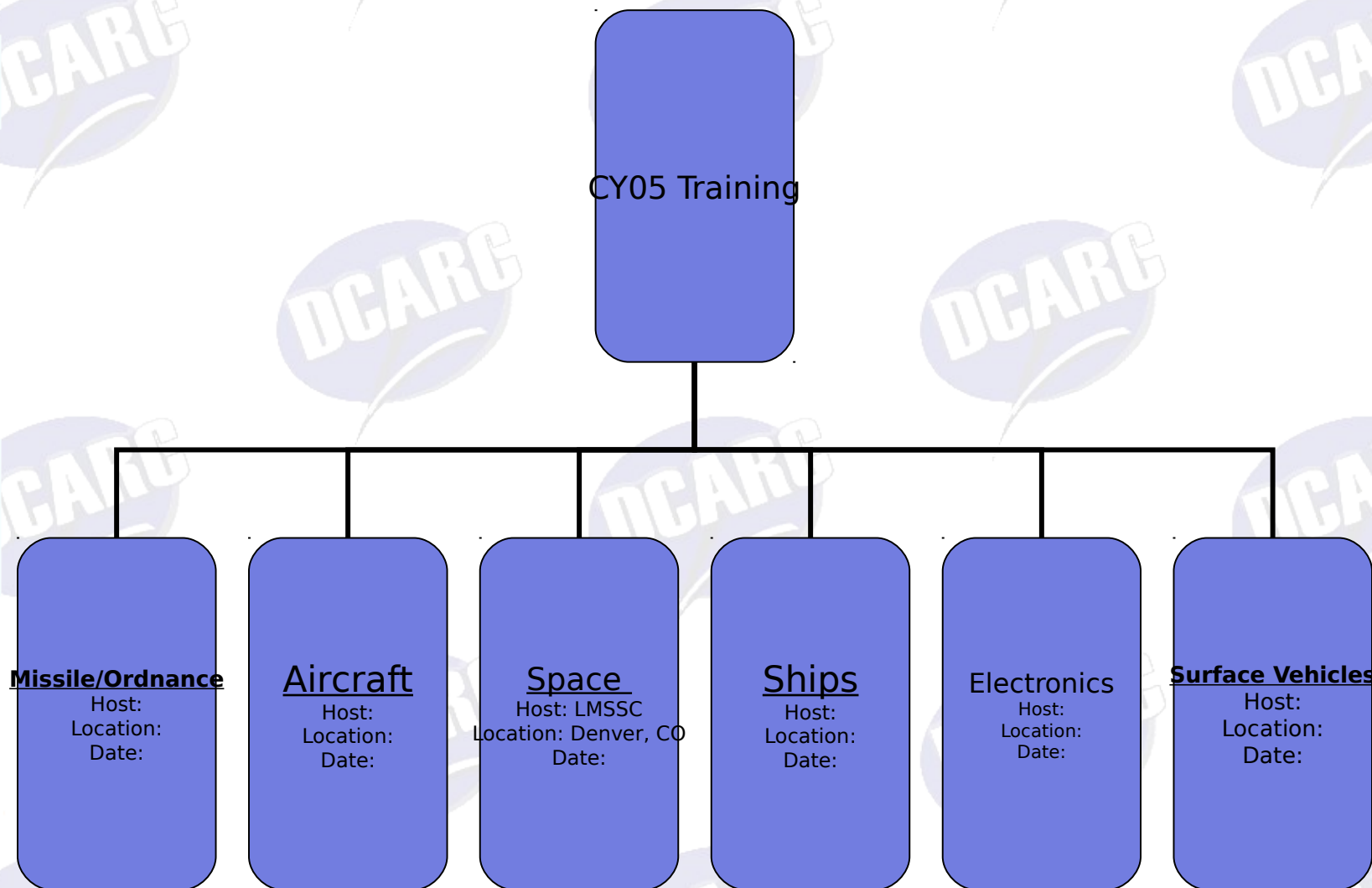
- Material Developers will generally, only share their true feelings and concerns about the CSDR Process, in a closed-door setting.
- DCARC learns first-hand how firm's fill out the DD Forms, how their process is automated/non-automated and what challenges the forms/policies pose for them.
- DCARC learns first-hand from program management staff:
 - How important CSDR Plan development approval and dissemination is
 - What struggles PM must overcome once contract is awarded and plans are not approved
 - Importance of communication between CAIG-DCARC-PM-Contractor



CY04 Training Plan

- ◆ Aircraft Systems- Completed Aug 2004
- ◆ Missile/Ordnance Systems- Completed Sept 2004
- ◆ Space Systems- Completed Oct 2004
- ◆ Ship Systems- Planned Nov 2004
 - Host: Northrop Grumman Ship Systems, New Orleans, LA
- ◆ Electronic Systems- Planning Dec 2004
 - Host: tentative Northrop Grumman ESSD, Baltimore, MD
- ◆ Surface Vehicle Systems- Planning Jan 2005
 - Host: USATACOM, Warren, MI

CY05 Training Plan

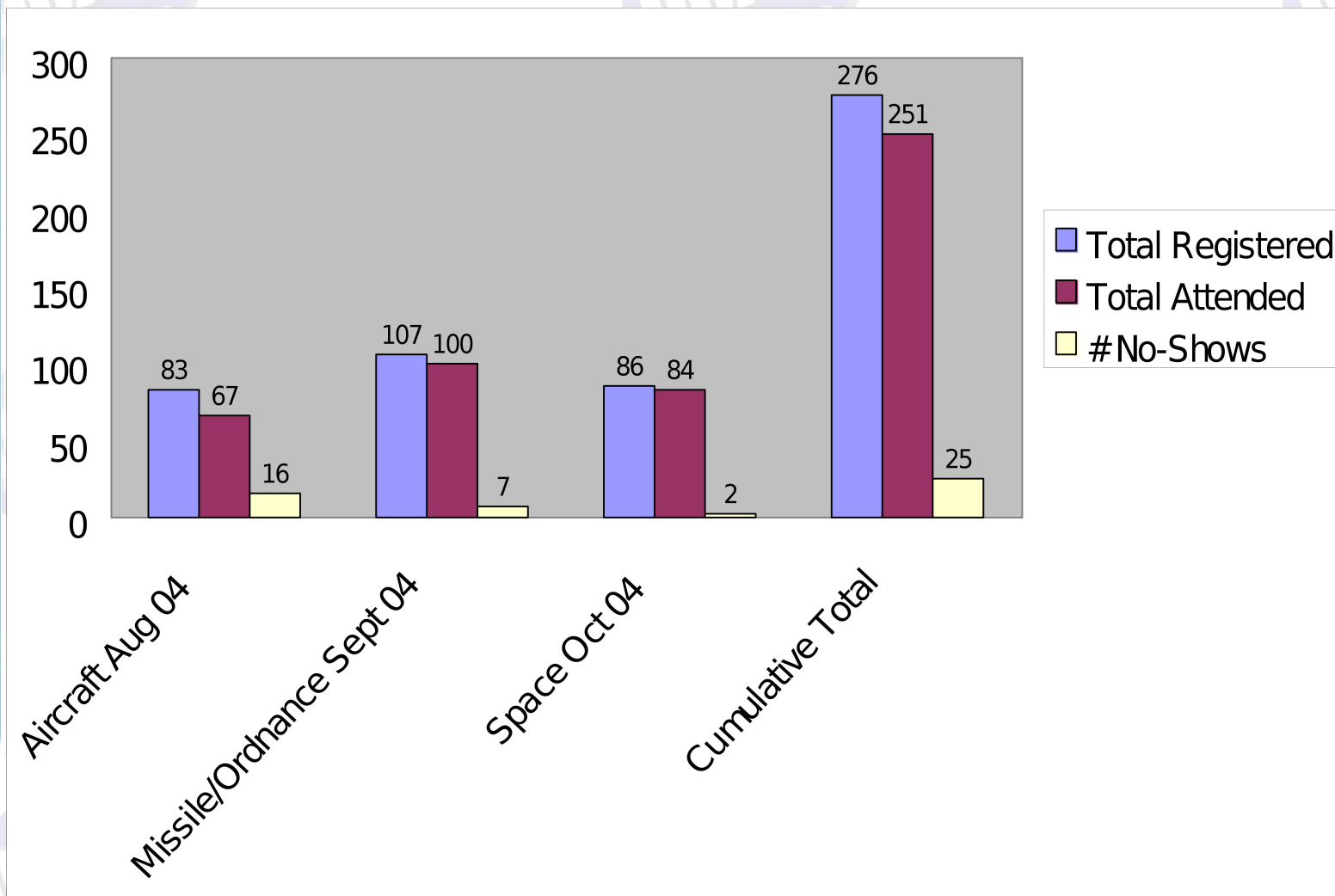


CY05 Training Plan

- ◆ If new DCARC office space materializes, the existing lecture-based training curriculum could be supplemented with smaller classes with actual hands-on training exercises possibly leading to some type of certification.
- ◆ Strong possibility of web-enabling portions of existing training material and building in-roads with DAU on-line instruction material.



FY04 Training Synopsis to Date



Distribution of Training Attendees

Aircraft Training

Count of Last Name		
Service	Affiliation	Total
Air Force	Government Employee	3
Army	Government Employee	9
DCMA/DCAA	Government Employee	8
Industry	Industry	46
Navy	Government Employee	1
Grand Total		67

Missile/Ordnance

Count of Last Name		
Service	Affiliation	Total
Air Force	Government Employee	5
Army	Government Employee	13
DOD	Government Employee	8
Industry	Government Contractor	2
	Industry	74
OSD	Government Employee	3
USN	Government Employee	2
Grand Total		107

Space Systems

Count of Last Name		
Service	Affiliation	Total
Air Force	Government Employee	16
DOD	Government Employee	14
Industry	Government Contractor	10
	Government Employee	1
	Industry	33
NASA	Government Employee	3
OSD	Government Employee	5
USN	Government Employee	2
Grand Total		84

Firms and Agencies Attending Training



Count of Last Name Organization	Session			Grand Total
	Aircraft Aug 2004	Missile/Ordnance Sept 2004	Space Training Oct 2004	
Aeronautical Systems Center (ASC)	2			2
Air Armaments Center (AAC)		4		4
Air Force Cost Analysis Agency (AFCAA)		1	1	2
Air Force Electronics Systems Center (ESC)	1		2	3
Air Force Space and Missile Systems Center (SMC)			13	13
Air, Space and Missile Defense (PEO ASMD)			1	1
ATK Company		2		2
Bell Helicopter Textron, Inc.	8			8
Booz Allen Hamilton			3	3
Defense Contract Audit Agency (DCAA)	6	2	1	9
Defense Contract Management Agency (DCMA)	2	5	13	20
Deputy Assistant Secretary-Army Cost & Economics (DASA-CE)	1	1		2
General Dynamics Corporation	1			1
General Dynamics Decision Systems (GDDS)			2	2
Honeywell, Inc.	1			1
HQ USSTRATCOM			1	1
Lockheed Martin Corporation	20	11	26	57
MCR Federal, LLC			1	1
Missile Defense Agency		1	1	2
NASA HQ			2	2
National Reconnaissance Office			1	1
Naval Air Systems Command (NAVAIR)	1			1
Naval Sea Systems Command (NAVSEA)		2		2
Naval Special Warfare (SPAWAR)			3	3
Northrop Grumman Corporation	7	4	1	12
Office of the Secretary of Defense (OSD)	5	3	5	13
Orbital Sciences Corporation			2	2
Raytheon Company		50		50
SAIC/NASA			1	1
Sikorsky Aircraft Company	2			2
Technomics, Inc.	4	1	3	8
Tecolote Research, Inc.			2	2
The Boeing Company	11	7	1	19
U.S. Army Air, Space & Missile Defense (USASMD)		4		4
U.S. Army Aviation & Missile Command (AMCOM)	7	6		13
U.S. Army Communications & Electronics Command (CECOM)	2			2
U.S. Army Tank Automotive & Armaments Command (USATACOM)		3		3
United Defense Limited Partnership (UDLP)	1			1
Westland Helicopters Limited (United Kingdom)	1			1
Grand Total	83	107	86	276

Final Thoughts

- ◆ We train so we don't strain



Defense Cost and Resource *DCAA Audits of* Center Contractor *Cost Data Reports* (CCDRs)



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CCDR Audits

- ◆ The Defense Cost and Research Center (DCARC) is the primary customer for DCAA audits of CCDRs.
- ◆ The DCARC has increased the focus and emphasis on CCDR reporting and has identified a need for increased audit assistance in evaluating contractor CCDR submissions.
- ◆ Audits of CCDRs may be performed under various circumstances
 - An annual CCDR surveillance audit is performed for each contractor with contracts containing CCDR reporting requirements.
 - A sample of the contractor's CCDR-covered contracts is selected for testing report data.
 - Coordinate with the DCARC to identify any high risk or sensitive contracts to include in the sample.

CCDR Audits

- DCARC Requested Audits - The DCARC will request an audit of the first CCDR submission that includes actual costs under a contract and may request audits of other specific CCDR submissions. The DCARC may also request evaluation of the effectiveness of the contractor's policies and procedures for accumulating data and preparing CCDRs.



Audit Objectives

- ◆ Obtain an understanding of and evaluate contractor procedures used to accumulate data and prepare CCDR reports
- ◆ Selectively test data generated by the contractor system and reported in CCDRs



New Audit Program and Shell Report

- ◆ Prior to September 2003, no standard audit program existed for CCDR audits
- ◆ DCAA worked closely with the DCARC to develop an audit program and shell report format that would satisfy the needs and concerns of the DCARC
 - Audit program and shell report format were issued in September 2003 and were effective for FY 2004 audits
- ◆ Audit program includes sections for evaluation of policies and procedures and report testing for each of the three CCDR reports



Audit Program

- ◆ Preliminary Steps
- ◆ CCDR Policies and Procedures
- ◆ Cost Data Summary Report (DD Form 1921)
- ◆ Functional Cost-Hour Report (DD Form 1921-1)
- ◆ Progress Curve Report (DD Form 1921-2)
- ◆ Concluding Audit Steps



Audit Program

- ◆ **Preliminary Steps**
- ◆ CCDR Policies and Procedures
- ◆ Cost Data Summary Report (DD Form 1921)
- ◆ Functional Cost-Hour Report (DD Form 1921-1)
- ◆ Progress Curve Report (DD Form 1921-2)
- ◆ Concluding Audit Steps



Preliminary Steps

- ◆ Review the permanent files for pertinent information to help establish the scope of audit, such as:
 - any audit leads;
 - prior audits of the CCDR policies and procedures; or
 - high risk contracts.
- ◆ Coordinate with the customer to identify any areas of concern and any high-risk or sensitive contracts to test in the audit.



Preliminary Steps, cont'd

- ◆ Consider the results of internal control audits and identify any internal control deficiencies that would impact the audit.
- ◆ Brief the contract and approved CCDCR plan to determine specific CCDCR requirements in the contract
- ◆ Perform a preliminary review of the CCDCR forms to determine whether the contractor has complied with the contract requirements regarding:
 - timing of submittal
 - which reports to submit
 - the format for the required reports

Preliminary Steps, cont'd

- ◆ Determine if technical assistance is required, such as for:
 - classification of recurring/nonrecurring costs;
 - classification of cost by functional area;
 - calculation of equivalent units; or
 - EAC.
- ◆ Determine subcontractor(s) CCDR reporting requirements:
 - Reporting - provides CCDR reports to prime
 - Direct report - provides CCDR reports direct to DCARC
 - Non-reporting - no CCDR requirements

Preliminary Steps, cont'd

- ◆ Summarize the results of the risk assessment and preliminary audit steps and document the scope of audit
 - Will the scope of audit include policies and procedures?
 - Which contracts and related CCDR reports have been selected for testing?



CCDR Policies and Procedures

- ◆ Have the contractor provide an overview of its CCDR system and related policies and procedures, including changes since the last evaluation.
- ◆ Evaluate the contractor's corrective actions taken on any prior reported deficiencies.
- ◆ Evaluate the adequacy of the contractor's policies and procedures.
- ◆ Test the contractor's implementation of CCDR policies and procedures using the detailed audit steps for testing of report data



CCDR Policies and Procedures, cont'd

- ◆ The CCDR policies and procedures should provide for:
 - A system to identify contracts containing CCDR requirements;
 - Compliance with contractual and CCDR Manual requirements regarding timing, content, format, and submission of CCDRs;
 - Preparation of CCDRs by appropriate contractor personnel;
 - Review and approval of CCDRs by an appropriate level of contractor management;



CCDR Policies and Procedures, cont'd

- Flowdown of CCDR requirements to subcontractors, as appropriate, including the frequency, timing, content, and submission of subcontractor CCDR reporting consistent with the prime contract requirements;
- Accumulation of incurred costs by recurring/ nonrecurring (or reasonable and consistent method for estimating);
- Accumulation of incurred costs by functional area (or reasonable and consistent method for estimating);



CCDR Policies and Procedures, cont'd

- Accumulation of cost by unit or lot (or reasonable and consistent method for estimating);
- Incorporation of subcontract data in accordance with CCDR requirements; and
- Preparation of estimates to complete and estimates at completion consistent with established estimating system policies and procedures and the CCDR requirements.



Evaluation of CCDR Policies and Procedures

- ◆ Determine if additional audit steps or an increase in substantive testing are required as a result of the evaluation of the contractor's CCDR policies and procedures and related internal controls.
- ◆ Document any noted deficiencies and discuss with the contractor.
 - Provide the contractor with a draft statement of condition and recommendation and obtain the contractor's corrective action



Audit Program

- ◆ Preliminary Steps
- ◆ CCDR System Policies and Procedures
- ◆ **Cost Data Summary Report (DD Form 1921)**
- ◆ **Functional Cost-Hour Report (DD Form 1921-1)**
- ◆ **Progress Curve Report (DD Form 1921-2)**
- ◆ Concluding Audit Steps



Report Testing

- ♦ Audit program contains separate sections for testing of each type of CCDR report.
- ♦ Audit steps in each section are similar but reflect the requirements of each report



Report Testing, cont'd

- ◆ Reconcile the amounts reported as incurred cost to date to the contractor's job cost ledger or other relevant accounting data.
- ◆ Verify that contractor has complied with CCDR requirements regarding reporting recurring and nonrecurring costs
- ◆ Verify that amounts reported on one CCDR report trace to related data element in other CCDR reports



Report Testing, cont'd

- ◆ Evaluate reported incurred cost and incurred labor hours by functional area:
 - If the contractor's system accumulates costs and labor hours by functional area:
 - Verify reported costs and hours by functional area to accounting system
 - Selectively trace to source documents
 - If the contractor's system *does not* accumulate costs and labor hours by functional area :
 - Verify reported split by functional area to supporting documents
 - Ensure contractor has estimated the split in accordance with its policies and procedures
 - Selectively test estimates for reasonableness
 - Request technical assistance, if needed



Report Testing, cont'd

- ◆ Evaluate reported recurring and nonrecurring cost:
 - If the contractor's system segregates recurring/nonrecurring costs:
 - Verify recurring/nonrecurring costs to accounting system
 - Selectively trace to source documents
 - If the contractor's system *does not* segregate recurring/nonrecurring costs:
 - Verify reported split of recurring/nonrecurring costs to supporting documents
 - Ensure contractor has estimated the split in accordance with its policies and procedures
 - Selectively test estimates for reasonableness
 - Request technical assistance, if needed



Report Testing, cont'd

- ◆ Evaluate the reported incurred cost by unit or lot:
 - If the contractor's system accumulates incurred cost by unit or lot costs:
 - Verify reported incurred hours and costs to accounting system
 - Selectively trace to source documents
 - If accounting system does not accumulate cost by unit or lot:
 - Verify the estimated unit or lot cost and labor hours to supporting documentation
 - Ensure the contractor estimated the unit or lot cost in accordance with its policies and procedures.
 - Selectively test estimates for reasonableness
 - Request technical assistance as necessary



Report Testing, cont'd

- ◆ Evaluate the contractor's estimate at completion:
 - Determine contractor's methodology for preparing the EAC
 - Verify the EAC was prepared in accordance with the contractor's policies and procedures
 - Verify the EAC reflects total estimated cost without regard for contract ceilings or contract price
 - Verify that EAC reflects best estimate for:
 - performing currently authorized work, plus
 - any additional direct work pending negotiation
 - Selectively test EAC amounts for reasonableness
 - Request technical assistance if needed

Report Testing, cont'd

- ◆ Compare cost incurred to date and EAC to other contract management reports, such as the CPR or C/SSR.
- ◆ Ensure all incurred and estimated costs have been included in the CCDR.
- ◆ Evaluate the contractor's inclusion of subcontract costs, if applicable, for compliance with the CCDR requirements.
 - Verify the reported subcontract costs to the contractor's supporting documentation.



Reporting Results of Audit

- ◆ CCDCR Audit Reports:
 - give an opinion as to whether the policies and procedures, if evaluated in the audit, are adequate;
 - give an opinion as to whether the evaluated CCDCR reports contain accurate data and are supported by the contractor's books and records;
 - describe in detail any significant issues supporting the audit opinion; and
 - summarize the conditions and recommendations found during the audit.
- ◆ All CCDCR audit reports are issued to the Defense Cost and Resource Center (DCARC) through the administrative contracting officer (ACO).
- ◆ The contractor is on distribution for the audit report through the ACO.



DCAA Resources

- ◆ Cognizant DCAA Auditor
- ◆ DCAA Website (www.dcaa.mil)
 - 17870 CCDDR Standard Audit Program (located under Audit Guidance)
 - DCAA Contract Audit Manual Section 11-400, Audits of Contractor Cost Data Reports (CCDRs) (located under DCAA Publications)



Defense Cost and Resource Center



Contractor Cost and Software Data Reporting Manual

Jack Cloos

*October
2004*



Table of Contents

- ◆ Foreword
- ◆ Table of Contents
- ◆ References
- ◆ Definitions
- ◆ Abbreviations
- ◆ CH. 1. Introduction and Background
- ◆ CH. 2. Reporting Requirements
- ◆ CH. 3. Stakeholder Responsibilities
- ◆ CH.4. Processing and Activities

Baseline is
the April 2004
Manual as shown on the
DCARC web site



Table of Contents (concluded)

- ◆ CH 5. Planning and Contracting
- ◆ CH 6. Reporting Guidance
- ◆ CH 7. Defense Automated Cost Information Management System (DACIMS)
- ◆ Appendices (CCDR and SRDR Forms and DIDs)
- ◆ List of Figures



Summary of Changes

- ◆ Title: Cost and Software Data Reporting Manual
- ◆ Definitions
 - Non-reporting Subcontractors
 - Recurring/Nonrecurring
- ◆ CH 1. Introduction and Background
 - C1.2. Background and Purpose. Adds: “Actual costs are essential in developing credible cost estimates that will result in appropriate levels of funding based on those estimates”
 - C1.3. SRDR Background and Purpose. Adds note that the data identified for collection was coordinated with selected industry representatives (not just internal DoD)



Summary of Changes (cont'd)

- ◆ CH 2. Reporting Requirements
 - C2.3. CCDR-Specific Requirements. Adds: “For CCDR purposes contract value represents the expected price at contract completion i.e., the contract award price plus all expected contract changes. This value is also based on the assumption that all contract options will be exercised”
 - C2.4. SRDR-Specific Requirements. Adds requirement in C2.4.1 that SRDRs are required on ACAT IA programs (as well as IC and ID)



Summary of Changes (cont'd)

- ◆ CH 3. Stakeholder Responsibilities
 - C3.4. Cost-Working Level Integrated Product Team (CWIPT). Adds requirement that “ A representative from the DCARC office also participates in the CWIPT process to ensure CSDR requirements are satisfied (e.g., product oriented WBS structure, CSDR requirements are included in RFPs, proposals, and contracts)”
 - C3.5. DoD Program Managers (and the CWIPT). Adds to C3.5.14 that “the DoD PM shall validate CDDR reports and notify the DCARC of the results within 15 days from receipt of the reports”
 - C3.7. Reporting Contractors. Deletes from C3.7.6 the option to submit initial CSDRs 60 days after IBR – now
 - all within 180 days of contract award



Summary of Changes (cont'd)

- ◆ CH 4: Processing and Activities
 - WBS and Dictionary – Adds: “The CAIG Chair must approve the program and contract WBS elements as part of the CSDR Plan approval process”
 - Recurring and Nonrecurring
- ◆ CH 5: Planning and Contracting
 - CSDR Plan Item 14 Reporting Frequency to Reports Required
 - WBS Element Code: DCARC will consider deviations for contractors (only) on an exception basis (from numeric decimal, decimal thousand, and alpha)



Summary of Changes (concluded)

- ◆ CH 5: Planning and Contracting (concluded)
 - Adds to RFP language: Contractor reports shall be prepared IAW the CSDR Manual, DoD 5000.4-M-1
 - Replaces SRDR CDRL examples to ensure consistency with CCDR CDRLs
- ◆ CH 6: Reporting Guidance
 - Changes web site to download approved government forms to:
 - <http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm>

Other Future Changes

- ◆ Add requirement to DoDI 5000.2 that the CAIG Chair must approve waivers to CCDR reporting for FFP contracts that were competitively awarded as long as competitive conditions continue to exist
 - Already noted in CSDR Manual (C4.2.2.4)
- ◆ DCARC has tentatively agreed with OSD/AT&L/ARA to change CCDR dollar value requirements to then year dollars for consistency with EVMS (CPR)
 - Requires change to DoDI 5000.2
 - Change CSDR Manual and DIDs



Other Future Changes (concluded)

- ◆ Other Likely EVMS Changes
 - CPR Format I will be required using a product oriented structure IAW the CWBS DID and, if CCDRs are required, adherence to the CSDR Manual is also required
 - G&A will not be included in individual WBS costs
- ◆ Will consider more commonality on meta data between CCDRs and CPRs



Open Discussion

Opportunity to
Add, Change, Delete, Reorganize
Anything and Everything
in the CSDR Manual



Defense Cost and Resource Center



Data Item Descriptions (DIDs)

*Ron Lile &
Jack Cloos*

*October
2004*



Summary

- ◆ Primary Discussions – CCDDR Proposed Changes to Date
 - Cost Data Summary Report
 - Functional Cost-Hour and Progress Curve Report
 - Contract Work Breakdown Structure
 - Recurring and Nonrecurring Changes
 - Subcontractor Reporting (separate briefing)
- ◆ Secondary Discussions – Potential SRDR Changes
 - Software Resources Data Report
 - Initial Government Report (Non-DID)
 - Initial Developer Report
 - Final Developer Report



SECURITY CLASSIFICATION

COST DATA SUMMARY REPORT			3. TYPE ACTION <input type="checkbox"/> CONTRACT NO: _____ <input type="checkbox"/> LATEST AMENDMENT: _____		4. APPROPRIATION <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT		5. REPORT AS OF (MM/DD/YY)		
1a. PROGRAM:		2. DOLLARS IN		<input type="checkbox"/> RFP NO: _____ <input type="checkbox"/> PROGRAM ESTIMATE		6. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO		7. FY FUNDED:	
1b. APPROVED PLAN NUMBER:									
8. CONTRACT TYPE	9. CONTRACT PRICE ESTIMATE	10. CONTRACT CEILING	11. CONTRACTOR TYPE <input type="checkbox"/> PRIME/ASSOCIATE <input type="checkbox"/> SUBCONTRACTOR		11b. NAME/ADDRESS (include ZIP Code)		12. NAME OF CUSTOMER: (Subcontractor Use Only)		

[illegible]

13. REMARKS:

POINT OF CONTACT (POC) INFORMATION

14a. NAME (Last, First, Middle Initial)		14b. DEPARTMENT		14c. TELEPHONE NO. (Include Area Code)	
14d. E-MAIL ADDRESS		14e. FAX NO. (Include Area Code)		14f. SIGNATURE	
				14g. DATE SIGNED (MM/DD/YY)	

DD FORM 1921, OCT 2003

Public reporting burden for this collection of information is estimated to average 33 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, D.C. 20503.

SECURITY CLASSIFICATION

CDSR - DD 1921 (DI-FNCL-81565A)

- ◆ Item 8. Contract Type. (Item 2i.under Preparation Instructions)
 - Shows 2 digit code for each contract type
 - Replace with acronym for contract type based upon FAR
 - Reason: EDI not used and facilitates recording and recognition
- ◆ Summary Entries
 - Change Total Cost (through Contractor G&A and Profit or Fee) to Total Price
 - Proper treatment of undistributed budget (UB), management reserve (MR) and other miscellaneous costs
 - UB and MR are temporary accounts that eventually will transfer to WBS costs and/or profit(loss)/fee
 - Is the Other Miscellaneous Cost necessary?

DD 1921 Summary Entries

- | Summary Item | Costs | Budget | EAC |
|----------------------------|-------|--------|-----|
| Undistributed Budget* | | | X |
| | X | | |
| Management Reserve* | | | X |
| | 0 | | |
| Other Miscellaneous Costs* | | X | X |
- * Note: CPR format and instructions do not provide for UB incurred costs to date, MR EACs, and the Other Miscellaneous Cost category



SECURITY CLASSIFICATION

FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT

Form Approved
OMB No. 0704-
0188

The public reporting burden for this collection of information is estimated to average 45 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions reducing the burden to Department of Defense, Washington Headquarters Service, Directorate for Information Operations and Reports (0704-0188), 1251 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR FORM TO THIS ADDRESS

1a. PROGRAM		1b. APPROVED PLAN NUMBER		2. REPORT AS OF (MM/DD/YY)		3. FY FUNDED			
4a. CONTRACTOR TYPE <input type="checkbox"/> PRIME/ASSOCIATE <input type="checkbox"/> SUBCONTRACTOR <input type="checkbox"/> SUBCONTRACT (Estimate by Reporting Contractor)				5. DOLLARS IN		6. HOURS IN			
4 b. NAME/ADDRESS (Include ZIP Code)				7a. CUSTOMER (Subcontractors Use Only)		7b. SUBCONTRACTOR (Estimated by Reporting Contractor)			
9. NUMBER OF REPORTING SUBCONTRACTORS				10. TYPE ACTION <input type="checkbox"/> CONTRACT NO. _____ LATEST AMENDMENT _____ <input type="checkbox"/> RFP NO. _____ <input type="checkbox"/> PROGRAM ESTIMATE		8. SUBCONTRACT NO.			
11. MULTI-YEAR CONTRACT <input type="checkbox"/> YES <input type="checkbox"/> NO				12. WBS ELEMENT CODE					
13. REPORTING ELEMENT				14. COST TYPE <input type="checkbox"/> RECURRING <input type="checkbox"/> NONRECURRING <input type="checkbox"/> TOTAL					
				15. QUANTITY TO DATE <input type="text"/> AT COMPLETION <input type="text"/>					
				16. APPROPRIATION <input type="checkbox"/> RDT&E <input type="checkbox"/> PROCUREMENT					
DATA ELEMENTS				PART I. FUNCTIONAL COST-HOUR REPORT					
				REPORTING CONTRACTOR		SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES		TOTAL	
				TO DATE A	AT COMPLETION B	TO DATE C	AT COMPLETION D	TO DATE E	AT COMPLETION F
ENGINEERING									
1. DIRECT LABOR HOURS									
2. DIRECT LABOR DOLLARS									
3. OVERHEAD									
4. MATERIAL									
5. OTHER DIRECT CHARGES (Specify)									
6. TOTAL ENGINEERING DOLLARS									
TOOLING									
7. DIRECT LABOR HOURS									
8. DIRECT LABOR DOLLARS									
9. OVERHEAD									
10. MATERIAL AND PURCHASED TOOLS									
11. OTHER DIRECT CHARGES (Specify)									
12. TOTAL TOOLING DOLLARS									
QUALITY CONTROL									
13. DIRECT LABOR HOURS									
14. DIRECT LABOR DOLLARS									
15. OVERHEAD									
16. OTHER DIRECT CHARGES (Specify)									
17. TOTAL QUALITY CONTROL DOLLARS									
MANUFACTURING									
18. DIRECT LABOR HOURS									
19. DIRECT LABOR DOLLARS									
20. OVERHEAD									
21. MATERIALS AND PURCHASED PARTS									
22. OTHER DIRECT CHARGES (Specify)									
23. TOTAL MANUFACTURING DOLLARS									
OTHER COSTS									
24. PURCHASED EQUIPMENT									
25. MATERIAL OVERHEAD									
26. OTHER COSTS NOT SHOWN ELSEWHERE (Specify)									
SUMMARY									
27. TOTAL COST (Direct and Overhead)									
28. REMARKS									

POINT OF CONTACT (POC) INFORMATION

29a. NAME (Last, First, Middle Initial)		29b. DEPARTMENT		29c. TELEPHONE NO. (Include Area Code)	
29d. E-MAIL ADDRESS		29e. FAX NO. (Include Area Code)		29f. SIGNATURE	
				29g. DATE SIGNED (MM/DD/YY)	

SECURITY CLASSIFICATION

FUNCTIONAL COST-HOUR AND PROGRESS CURVE REPORT

PART II. PROGRESS CURVE REPORT

1. WBS ELEMENT CODE	3. UNITS/LOTS COMPLETED (<i>Specify</i>)				<input type="checkbox"/> LOT TOTAL OR
2. REPORTING ELEMENT	<input type="checkbox"/> UNIT TOTAL OR	<input type="checkbox"/> LOT AVERAGE			
	<input type="checkbox"/> UNIT AVERAGE				

	COMPLETED UNITS/LOTS A				WORK-IN- PROCESS (WIP) B	TO COMPLETE C
	1	2	3	4		
DATA ELEMENTS						
1. MODEL AND SERIES						
2. FIRST UNIT OF LOT/WIP UNITS						
3. LAST UNIT OF LOT						
4. CONCURRENT UNITS/LOTS						
CHARACTERISTICS						
5.a						
5.b						
5.c						
PRIME CONTRACTOR						
6. DIRECT QUALITY CONTROL LABOR HOURS						
7. DIRECT MANUFACTURING LABOR HOURS						
8. TOTAL DIRECT LABOR HOURS						
9. DIRECT QUALITY CONTROL LABOR DOLLARS						
10. DIRECT MANUFACTURING LABOR DOLLARS						
11. TOTAL DIRECT LABOR DOLLARS						
12. RAW MATERIALS AND PURCHASED PARTS						
13. PURCHASED EQUIPMENT						
14. TOTAL DIRECT DOLLARS						
SUBCONTRACT/OUTSIDE PRODUCTS AND SERVICES						
15. DIRECT QUALITY CONTROL LABOR HOURS						
16. DIRECT MANUFACTURING LABOR HOURS						
17. TOTAL DIRECT LABOR HOURS						
18. DIRECT QUALITY CONTROL LABOR DOLLARS						
19. DIRECT MANUFACTURING LABOR DOLLARS						
20. TOTAL DIRECT LABOR DOLLARS						
21. RAW MATERIALS AND PURCHASED PARTS						
22. PURCHASED EQUIPMENT						
23. TOTAL DIRECT DOLLARS						
TOTAL PER UNIT/LOT						
24. DIRECT QUALITY CONTROL LABOR HOURS						
25. DIRECT MANUFACTURING LABOR HOURS						
26. TOTAL DIRECT LABOR HOURS						
27. DIRECT QUALITY CONTROL LABOR DOLLARS						
28. DIRECT MANUFACTURING LABOR DOLLARS						
29. TOTAL DIRECT LABOR DOLLARS						
30. RAW MATERIALS AND PURCHASED PARTS						
31. PURCHASED EQUIPMENT						
32. TOTAL DIRECT DOLLARS						
33. % SUBCONTRACT OR OUTSIDE PRODUCTION AND SERVICES						
34. REMARKS						

POINT OF CONTACT (POC) INFORMATION

35a. NAME (<i>Last, First, Middle Initial</i>)	35b. DEPARTMENT	35c. TELEPHONE NO. (<i>Include Area Code</i>)
35d. E-MAIL ADDRESS	35e. FAX NO. (<i>Include Area Code</i>)	35f. SIGNATURE
		35g. DATE SIGNED (<i>MM/DD/YY</i>)

FCHR - 1921-1(DI-FNCL-81566A)

- ◆ Already changed
 - Part I - Line 26. Other Costs Not Shown Elsewhere. Specify and enter all direct costs for the reporting element not assigned to the functional categories (Engineering, Manufacturing, Quality Control, and Tooling). Provide details for all of these costs in the “Remarks” section (item 28).
 - This eliminates undistributed budget, management reserve, and facilities capital cost of money
 - Reason: Did not want summary items included in WBS totals
 - Part I- Line 27. Enter the total of all direct and overhead costs.
 - Eliminates summary items to show WBS costs only (direct and overhead)



FCHR - 1921-1(DI-FNCL-81566A)

◆ Proposed Changes

- Part I - Item 14. Cost Type. Add wording to clearly note that contractors have the option of reporting actual R/NR breakout rather than applying the 95% rule
- Part II - At Completion. Column C. Enter estimates at completion for all work specified in the contract. This includes costs and hours for completed units, work in process units, and units not yet started and shown in Column B.
 - Reason: Need total costs and hours rather than to complete costs and hours
- Definitions: Restore definitions of the engineering and tooling functional categories under Definitions



Engineering

- ◆ The Engineering functional category includes the effort and costs expended in the scientific exploration, study, analysis, design, development, evaluation, and redesign of a specific task or WBS element. Engineering also includes preparation of specifications, drawings, parts lists, and wiring diagrams; technical coordination between engineering and manufacturing; coordination of suppliers; planning for and scheduling of tests; analysis of test results, reduction of data; and preparation of reports. It also includes the determination and specification of requirements for reliability, maintainability, and quality control. Engineering is generally considered to be a basic functional cost category. Engineering costs may also be subdivided into recurring and nonrecurring components. Nonrecurring engineering costs usually include the costs of all design and development activities through first release of drawings and data. Recurring engineering costs are generally related to sustaining engineering that involves the maintenance and updating of drawings and data and all continuous support of the fabrication, assembly, test, and delivery of contract end items.



Tooling

- ◆ The Tooling functional category includes original equipment and manufacturing aids a contractor acquires, manufactures, or replaces in the performance of a contract. Examples include jigs, dies, fixtures, molds, patterns, and special gauges. These tools, sometimes called special tools, are so specialized that their use is limited to the production of supplies or parts or the performance of services that are particular to the needs of the customer. In military business the “title” for tooling resides with the customer; in commercial practice the “title” resides with the contractor. Tooling costs may also be subdivided into recurring and nonrecurring components. Nonrecurring tooling costs consist of all design and development costs through initial release of basic tooling. Recurring tooling costs are generally related to sustaining tooling that involves the maintenance, repair, modification and replacement of basic tooling following initial release.



DIDs and Recurring/Nonrecurring Costs

◆ Background

- R/NR split has been a problem for cost estimators
 - Differences among contractors and DoD cost analysts
 - Absence of clear definitions and often not provided for in accounting systems
- Space Systems Cost Analysis Group (SSCAG) recently raised issue relative to CCDR definitions



Recurring Costs (CCDR)

- ◆ Repetitive elements that vary with quantity during any program phase
 - Production-like costs in producing prototype and test units during development
 - Complete reporting elements produced either for test or operational use during production
- ◆ Also includes the following types of work:
 - Engineering required for redesign, modifications, reliability, maintainability, associated evaluation and liaison
 - Tool maintenance, modification, rework, and replacement
 - Training Service personnel to operate and maintain equipment
 - Reproduction and updating of technical data and manuals



Nonrecurring Costs (CCDR)

- ◆ Costs that generally occur only once during the system's life cycle that are typically found in Engineering, System Test, Tooling, and Pre-production activities
- ◆ Also includes
 - Basic design and development through first release of engineering drawings and data
 - All system and subsystem activities test activities (except end-item acceptance testing)
 - Configuration audits
 - Qualification testing
 - Technical publications through first release
 - All basic tooling



Nonrecurring Costs (CCDR)

- ◆ Also includes
 - Engineering models
 - Partially built units for development or test purposes or units not built to operational configuration
 - Specialized work force training
 - Can include nonrecurring design work in production where the contractor is incorporating configuration or production line changes
 - Appears in Definitions section but not in DID

Do we need to include software?

Recurring/Nonrecurring (SSCAG)

- ◆ Redesign, rework, and retest of space hardware
 - NR if due to design flaws
 - R if due to workmanship problems
- ◆ Initial spares
 - Space H/W: R
 - Ground H/W: NR
- ◆ Replenishment spares
 - Space H/W: R
 - Ground H/W: NR

What is best way to require recurring and nonrecurring definitions on CWBS items?

Contract Work Breakdown Structure DI-MGMT-81334A

Any Proposed Changes?



SRDR DIDs and Preparation Instructions

Any Proposed Changes?



Defense Cost and Resource Center Subcontractor Reporting



*Ron Lile and
Jack Cloos*

October 2004

A collage of various defense-related images including a satellite, a stealth bomber, a rocket launch, a helicopter, a tank, a ship, and a fighter jet.

**The On-line
DoD Cost
Research
Library**

Enhancing DoD Cost Analysis

The Defense Cost and Resource Center
1111 Jefferson Davis Hwy, Suite 500
Arlington, Virginia 22202
Phone: 703.602.3301 Fax: 703.602.8944
<http://dcarc.pae.osd.mil>

Summary

- ◆ Current Reporting Requirements
 - DD 1921
 - DD 1921-1
- ◆ Proposed Requirements
 - Subcontractor Categories
 - DD 1921
 - DD1921-1



Subcontract Requirements

- ◆ Reporting thresholds –same as prime contracts for ACAT ID and IC IAW DoDI 5000.2
 - > \$50M (FY 2002 dollars)
 - High-risk or high-technical interest contracts between \$7M and \$50M (FY 2002 dollars) as determined by the CWIPT
- ◆ DoD 5000.4-M-1 and the example CDRL require that primes flow CCDR requirements to DIDs require *but*

Revise CCDR DIDs to mandate flow down of CCDR requirements

Contractors
Requirements

What are Nonreporting Subcontractors?

- ◆ Current definition: A company that has a subcontract without CCDDR reporting requirements with a company whose prime contract contains CCDDR reporting requirements

Primarily intended to apply to any subcontract that meets the CCDDR reporting thresholds but does not have CCDDR requirements



DD 1921 DID

Summary of Reported DD Form 1921 Data

DD Form 1921 Data Provided by Prime Contractors	Recurring Costs	Nonrecurring Costs	Total Costs
Prime contractor data	◆	◆	◆
Subcontractor data			
Subcontractors reporting to prime contractor	◆	◆	◆
Subcontractors reporting to DoD	❖	❖	◆
Nonreporting subcontractors	□	□	◆

- ◆ Available to and reported by prime contractor.
- ❖ Not reported by prime contractor (data available to DoD analysts only).
- Estimated and reported by prime contractor

Current Subcontractor Requirements

- ◆ Subcontractors reporting to Prime
 - Reporting Elements: As reported by sub
 - Costs Incurred: As reported by sub
 - R/NR Split: As reported by sub
 - Summary Items (Non-WBS Elements)*: As reported by sub
- * Subcontractor G&A, Miscellaneous, Undistributed Budget, Management Reserve, FCCOM, and Profit or Fee (are shown separately for each reporting subcontractor)



Current Subcontractor Requirements

- ◆ Subcontractors reporting to DoD
 - Reporting Elements: All sub WBS elements required by prime
 - Costs Incurred: Total costs (implied price) estimated by prime
 - R/NR Split: None
 - Summary Items (Non-WBS Elements): None



Current Subcontractor Requirements

- ◆ Nonreporting Subcontractors
 - Reporting Elements: All sub WBS elements required by prime
 - Costs Incurred: Total costs estimated by prime (assumes cost data available)
 - R/NR Split: None
 - Summary Items (Non-WBS Elements): Implied that they are estimated by prime

Detailed breakout intended only for contracts that meet CCDR thresholds – report price for other subcontracts

DD 1921-1 DID (Part I)

Current Subcontractor Requirements

Reporting Requirements in Part I of DD Form 1921-1

Line #	Data	Prime Contractor Data	Subcontractor Data		
			Subcontractors Reporting to the DoD	Nonreporting Subcontractors	Nonreporting Subcontractors (Airframe)
1-5	Engineering Line Items	◆	<input type="checkbox"/>		◆
6	Total Engineering	◆	<input type="checkbox"/>	◆	◆
7-11	Tooling Line Items	◆	<input type="checkbox"/>		◆
12	Total Tooling	◆	<input type="checkbox"/>	◆	◆
13-16	Quality Control Line Items	◆	<input type="checkbox"/>		◆
17	Total Quality Control	◆	<input type="checkbox"/>	◆	◆
18-22	Manufacturing Line Items	◆	<input type="checkbox"/>		◆
23	Total Manufacturing	◆	<input type="checkbox"/>	◆	◆
24-26	Other Costs	◆	<input type="checkbox"/>		◆
27	Total Cost	◆	◆**	◆	◆

◆ Actual data included in report.

◆** Actual data included in "Remarks" section of report (item 28).

◆ Estimated data included in report.

☐ Data available to DoD analysts only.

Note: Report data for total contract only.

Needs to
be in line 27

DD 1921-1 DID (Part II)

Current Subcontractor Requirements

Reporting Requirements in Part II of DD Form 1921-1

Line #	Data	Prime Contractor Data	Subcontractor Data	
			Subcontractors Reporting to the DoD	Nonreporting Subcontractors
9	Direct Quality Control Labor Dollars	◆		
10	Direct Manufacturing Labor Dollars	◆		
12	Raw Materials and Purchased Parts	◆		
13	Purchased Equipment	◆		
14	Total Direct Dollars	◆		
16	Direct Manufacturing Labor Hours		<input type="checkbox"/>	◆
18	Direct Quality Control Labor Dollars		<input type="checkbox"/>	◆
19	Direct Manufacturing Labor Dollars		<input type="checkbox"/>	◆
21	Raw Materials and Purchased Parts		<input type="checkbox"/>	◆
22	Purchased Equipment		<input type="checkbox"/>	◆
23	Total Direct Dollars		◆	◆

- ◆ Actual data included in report.
- ◆ Estimated data included in report.
- Data available to DoD analysts only.

Missing lines 6,7, and 8

Estimated

Subcontractor Categories

- I. No CCDDR reporting requirements
 - Do not meet reporting thresholds or
 - No need for data as determined during the CSDR process (CWIPT proposes and CAIG Chair approves)
- II. Reporting subcontractors with CCDDR contract requirements
- III. Nonreporting subcontractors meet reporting





A Proposal for Subcontractor Reporting Requirements

Category II Subcontractor Reporting on Prime 1921 Report

- ◆ Subcontractor Reporting to DoD**
 - Reporting Element: Level 1 of Subcontract WBS
 - Costs Incurred: Total subcontract price
 - R/NR Split: Estimated
 - Summary Items (Non-WBS Elements): None
- ◆ Sub Reporting to Prime
 - Reporting Element: Level 1 of Subcontract WBS
 - Costs Incurred: *Total actual costs* for WBS elements
 - R/NR Split: As reported by sub
 - Summary Items: As reported by sub
 - Attach sub report with prime submittal

** Apply same rule for Category I subcontracts

Category II Subcontractor Reporting Prime 1921-1 Report

- ◆ Subcontractor reporting to DoD**
 - Reporting Element: Level I WBS of Prime Contract and selected WBS elements
 - Entry: Total price in Purchased Equipment under Subcontract
 - R/NR Split: Estimated
- ◆ Subcontractor reporting to Prime
 - Reporting Element: As required by Prime
 - Costs Incurred: As reported by sub
 - R/NR Split: As reported by sub
 - Attach sub report with prime submittal

** Apply same rule for Category I subcontracts

Category III Subcontractor Reporting

- ◆ Prime 1921 and 1921-1 Reports
- ◆ Same as rules for Category II Prime reports where subcontractors submit reports through Primes

Requires estimated data breakouts by Primes as if subcontractor prepared report



Open Discussion



Any Other Proposed Changes

Subcontractor Reporting: Next Steps

- ◆ Revise tables and related text
- ◆ Coordinate with FG attendees via email
 - Post to DCARC web site for other comments
- ◆ Incorporate all feedback into the final draft
 - Post to web site



Defense Cost and Resource Center MIL-HDBK-881 Update



*Neil Albert
MCR*

**The On-line
DoD Cost
Research
Library**

Enhancing DoD Cost Analysis

The Defense Cost and Resource Center
1111 Jefferson Davis Hwy, Suite 500
Arlington, Virginia 22202
Phone: 703.602.3301 Fax: 703.602.8944
<http://dcarc.pae.osd.mil>

Update to incorporate DoD changes in Acquisition Policy and Guidance

- ◆ Task 1: Update for DoD 5000 changes
- ◆ Task 2: Identify how the WBS can support each acquisition phases and the actions necessary to enter and exit successfully
- ◆ Task 3: Reflect changes to new and improved approaches to product development (i.e., IPTs)
- ◆ Task 4: Show how WBS is developed and maintained throughout the life cycle to meet program management goals as well as cost, schedule and technical objectives
- ◆ Task 5: Show how the WBS is the common link which will unify the planning, scheduling, estimating, budgeting, configuration management and performance reporting disciplines



Proposed Schedule

Task

1. Update to Include DoD Policy and Guidance

2. Add/Improve on WBS Definitions

3. Used with newer terms and policies

4. Characterized as an Acquisition tool

5. Support Budget, Cost, Schedule, Technical, Contractual, and Program Management

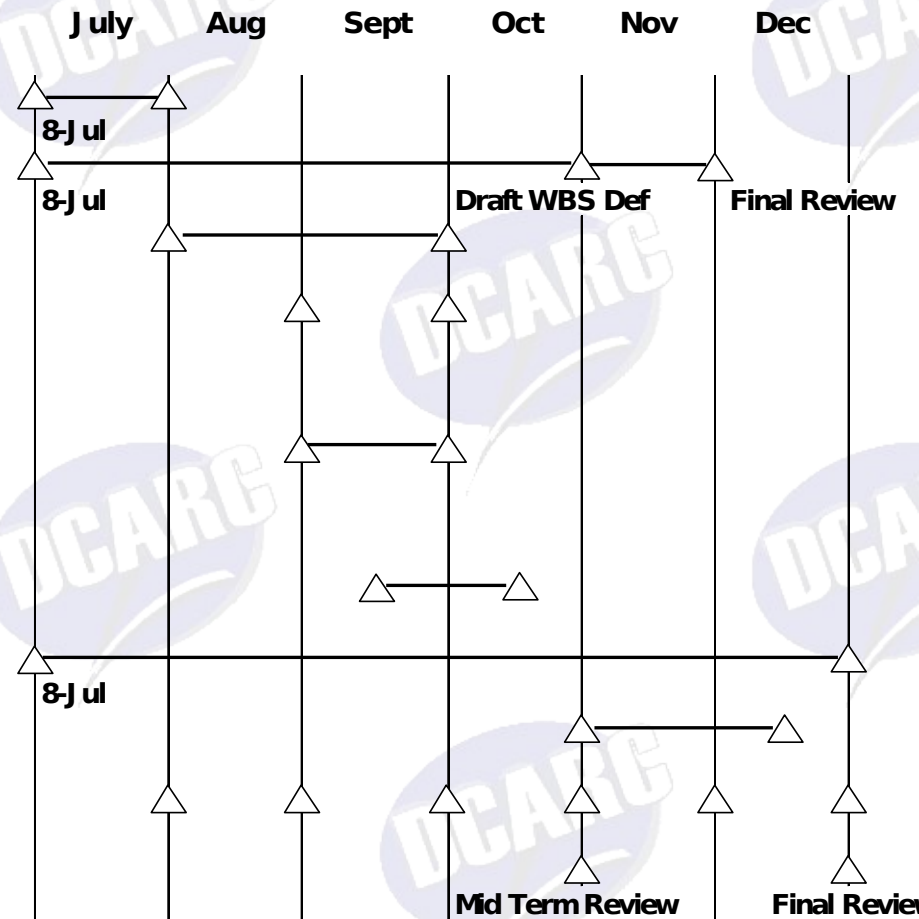
6. Integration with Program Management, Systems Engineering, Contractual and Cost Estimating Documents

7. Ensure Industry Participation

8. Format for Web Access

Monthly Progress Reports

Government Review



Expectations

- ◆ Integrating with current AT&L and DCARC activities
 - New procedures and requirements being considered that affect the use of the WBS in both CPR and CSDR
 - Become involved with working groups already making changes to CPR and CSDR processes that affect the WBS
 - Ensure Handbook becomes a comprehensive guide for Industry and Government
- ◆ Outreach support
 - Work with major DoD organizations to get the inputs needed to make the Handbook a government and industry wide document
 - Use participation in all major professional associations
 - Leverage relationships to gain insight, lessons learned and new innovations and ideas for better execution

Task 1: Add/Improve upon WBS definitions

- ◆ Update definitions to reflect advancement of technology in design, development and manufacturing
 - Heavier reliance on software
 - Commercial-off-the-shelf items

(Status: Draft version in process to include Working groups formed to address issues)
- ◆ Establish a Working Group consisting of Government and Industry to review at least the following appendices and provide comments and potential revisions
 - Aircraft – specifically UAVs (Draft in process)
 - Space – Multiple definitions – NASA, NRO, DoD, etc. (Definitions still in progress)
 - Ships – Waived for CSDR – no longer (Draft in process)

(Other Appendices modified as necessary)



Task 2: Clarify how WBS is used with newer terms and processes

- ◆ System of Systems/Family of Systems
 - Clarify terminology and highlight examples of how the WBS is created given the requirement for system interaction and interoperability
 - Show example of System of Systems WBS
- ◆ Spiral/Evolutionary Development (Hardware/Software)
 - Each spiral provides new functionality which could be considered product oriented, but better definition is required
 - Will define terminology and provide examples of how the WBS is created given an evolutionary requirement. (Process is already defined in the software WBS description --- most software engineers used spiral development to create software in the early 1990's)
- ◆ Risk Analysis
 - Description of risk analysis use with WBS
 - System Engineering use to trade cost, schedule and technical risk of the system to meet end-item requirements

(Status: Draft in progress to include appropriate definitions)

Task 3: Ensure the WBS is characterized as an Acquisition tool

- ◆ To decrease the use of multiple WBSs used by different functional areas, define the WBS for all practical uses:
 - Cost Estimating
 - EVM
 - Database
 - Scheduling
 - Requirements planning, etc.
 - ◆ Establish group of system engineers, cost analysts, logisticians, earned value management technicians, program managers and contracts personnel to agree and commit to one approach defining and using the WBS for program support
 - Maintain a product oriented WBS reporting at level 3 (except for high cost, high risk or technology driving elements)
 - Communicate result by follow on training
- (Status: Meeting to be established within two months
-contacting appropriate associations)



Task 4: Support Budget, Cost, Schedule, Technical, Contractual and Performance Management

- ◆ Identify DoD 5000 has mandated certain reporting functions that rely on the WBS
 - Contract Funds Status Report
 - Contractor Cost Data Reporting
 - Earned Value Management(Status: Implementing into Draft documentation)
- ◆ Use example
 - Demonstrate how acquisition reports will track to each other if a single WBS is used
 - Show relationship to
 - CLIN
 - SOW
 - Requirements
 - IMP/IMS(Status: Not started)

Task 5: Integrates with PM and SE Documents, Contracts and Cost Estimating

- ◆ Re-enforce the use of the WBS via example
 - Show that without the WBS, the IMP/IMS relationship to other acquisition artifacts would not be possible

(Status: Implementing into Draft documentation)



Ensure Industry Participation

- ◆ Involve those who are affected by the changes by having them participate in making those changes
- ◆ Embrace as many joint industry/government associations as possible to get buy-in and feedback
 - Task 1&2: Working groups comprised of functional experts to re-examine WBS definitions proposed for review
 - Task 3: Use Govt and industry representatives to ensure all aspects of WBS application and usage are considered and reflect real life situations
 - Program Management: Project Management Institute (PMI)
 - System Engineering: International Council on Systems Engineering (INCOSE) and National Defense Industrial Assoc (NDIA)
 - Cost Estimating: Society of Cost Estimating and Analysis; Cost and Software Data Reporting (CSDR) Focus Group and Space Systems Cost Analysis Group (SSCAG)
 - Earned Value Management: PMI's College of Performance Management and NDIA's Program Management Subsystems Committee
 - Logistics: Society of Logistics Engineers (SOLE)
 - Contract Management: National Contract Management Association (NCMA)
 - Tasks 4&5: Use DAU to ensure changes reflect understanding and communication of the revisions to DoD 5000 processes and terminology affecting the WBS





Recap of Issues and Wrap-up

Ron Lile

Summary

- ◆ Importance of Contractor policies/procedures for preparation and submittal of CCDRs/CSDRs
 - Provides consistency within company/segment
 - Provides the framework for what DCAA will audit
- ◆ DCAA audits
 - Not a new requirement (since 1973)
 - Provide assurance that system working in early stages of contract
 - DCAA reliance on DCMA for RE/NRE (subject to interpretation)
- ◆ Recurring/NRE:
 - Consider making RE/NRE definition part of CCDR plan which applies to all primes and all subs (consistent across program)
 - Consider making RE/NRE definition part of CAS disclosure statement (consistent across all programs within company/segment)
 - Avoid prescriptive definition of RE/NRE
 - Provide some examples of RE/NRE cost, especially software
 - Development = NRE
 - Rehosting = NRE
 - Maintenance & upkeep = RE

Summary (cont'd)

- ◆ Equivalent units:
 - Not a science project, but a sensible/reasonable approach
- ◆ WBS dictionaries should be maintained, but only submitted coincident w/CSDR submission
- ◆ Changes to CSDR Manual:
 - C3.5 “the DoD PM shall validate review and comment on CCDD reports and notify the DCARC of results within 15 days from receipt of the reports”
 - C3.7 initial CCDD report submission “within 180 days of contract award” language will be explored further;
 - Investigate using an IBR-like process instead of this requirement to provide assurance that Contractor understands how to report CCDDs
 - Take out the word “deliverable” from SRDR (desire to capture information on both deliverable and undeliverable (i.e. test) software

Summary (cont'd)

- ◆ Provide overview of CWIPT process
 - Who is involved
 - Responsibilities
- ◆ Emphasis will be placed on training Contracting personnel regarding the responsibilities of CSDR requirements
- ◆ Make OH reporting a critical issue for next meeting

